

ATTORNEY DOCKET NO. LIN 13-38

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: **Wen Lin, et al.**  
Serial No.: **10/814,682**  
Filed: **March 31, 2004**  
Title: **SEMICONDUCTOR DEVICE HAVING A DOPED LATTICE  
MATCHING LAYER AND A METHOD OF MANUFACTURE  
THEREFOR**  
Grp./A.U.: **2823**  
Examiner: **Julio J. Maldonado**  
Confirmation No.: **8308**

Mail Stop Appeal Brief-Patents

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Sir:

**APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. §41.41**

In response to the Examiner's Answer mailed February 24, 2009, the Appellants submit this  
Reply Brief as required by 37 C.F.R. §41.41.

## **I. Reply to Examiner's Arguments**

The Examiner still continues to argue that the claimed limitation that the source/drain regions thereof do not need to extend into the co-doped germanium buried layer are just dimensional limitations that would be easily achieved through experimentation. The Examiner, whom is most likely without any legal training, is misapplying the law of the cited cases to the facts of the instant patent application. Dimensional limitations, as that element is defined in the cases cited by the Examiner, does not extend to the inclusion or absence of a feature in a specific layer (e.g., the inclusion of a feature beyond a barrier that separates one material layer from another), but appears to relate to minor differences in dimensions within a given region. Accordingly, this argument of the Examiner is without merit.

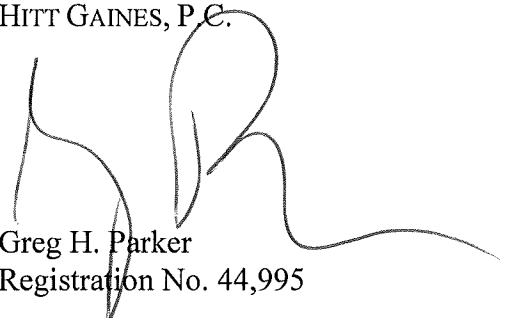
The Examiner again argues in the Examiner's Answer that Column 5, lines 36 thru 51 of Liaw suggests that the substrate discussed with respect to FIG. 4 may comprise a co-doped germanium buried layer. First, this text of Liaw is specifically directed to the embodiment of FIG. 3. For example, this text begins with the sentence "[t]he method according to the present invention is also suitable for forming low defect heteroepitaxial films having a large lattice mismatch (greater than about 3%) compared to the substrate the heteroepitaxial films are grown on." The first few paragraphs of Column 5 of Liaw, which are discussing the invention of FIG. 3, are discussing substantially the same technical subject. Second, this text does not even mention a germanium buried layer, but is directed to SiC, GaAs, AlN, GaN, AlGaAs, AlGaN or the like or substrates such as silicon. Thus, even if this statement were to apply to FIG. 1, as opposed to FIG. 3 as Liaw makes it clear, there is still no teaching or suggestion that the source/drain regions do not extend into the co-doped germanium buried layer, as is presently claimed.

## **II. Conclusion**

For the reasons set forth above, the Claims on appeal are patentably nonobvious over Bevk in view of Liaw, and further in view of Ramadani. Accordingly, the Appellants respectfully request that the Board of Patent Appeals and Interferences reverse the Examiner's Final Rejection of all of the Appellants' pending claims.

Respectfully submitted,

HITT GAINES, P.C.



Greg H. Parker  
Registration No. 44,995

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